

# NEVADA ENVIRONMENTAL RESPONSE TRUST

LE PETOMANE XXVII, INC., NOT INDIVIDUALLY BUT SOLELY AS ENVIRONMENTAL RESPONSE TRUST TRUSTEE

## MAY 3, 2017 QUARTERLY STAKEHOLDERS CALL

## MAY 3, 2017 STAKEHOLDERS CALL

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# TRUST FINANCIAL UPDATE

MAY 3, 2017 STAKEHOLDERS CALL

# NEVADA ENVIRONMENTAL RESPONSE TRUST

## FINANCIAL UPDATE

|  | ADMINISTRATIVE ACCOUNTS |            | ENVIRONMENTAL ACCOUNTS |                        |
|--|-------------------------|------------|------------------------|------------------------|
| Initial Funding                            | \$                      | 8,602,853  | \$                     | 72,419,165             |
| Anadarko Proceeds<br>(100% of Tax Reserve) | \$                      | 56,642,877 | \$                     | 1,076,214,658          |
| Account Balances<br>(As of March 31, 2017) | \$                      | 59,416,661 | 91.1%                  | \$ 1,097,223,698 95.5% |
| Cash                                       | \$                      | 2,302,157  | 3.9%                   | \$ 35,847,976 3.3%     |
| U.S. Obligations                           | \$                      | 36,350,000 | 61.2%                  | \$ 684,940,000 62.4%   |
| Corporate Bonds                            | \$                      | 8,450,000  | 14.2%                  | \$ 142,408,000 13.0%   |
| Equities                                   | \$                      | 12,314,504 | 20.7%                  | \$ 234,027,722 21.3%   |
| Distribution<br>(Northern Trust / US Bank) | 2.4 % / 97.6 %          |            | 0.1 % / 99.9 %         |                        |

*April NERT holdings report to be issued to NERT Stakeholders 5/20/17*

| TRUST CLAIMS SUMMARY |    |           |     |                      |                  |
|----------------------|----|-----------|-----|----------------------|------------------|
| AIG BMI Claims       | \$ | 4,265,831 |     | DOD Demands (-2015)  | \$ 11,050,380    |
| AIG BMI Recovery     | \$ | 3,999,011 | 94% | DOD Recovery (-2015) | \$ 6,969,760 63% |

# NEVADA ENVIRONMENTAL RESPONSE TRUST

## FINANCIAL UPDATE

|                           | ADMINISTRATIVE ACCOUNTS |           |       | ENVIRONMENTAL ACCOUNTS |            |
|---------------------------|-------------------------|-----------|-------|------------------------|------------|
| REALIZED GAINS/(LOSSES)   |                         |           |       |                        |            |
| Current YTD               | \$                      | 82,942    | 29.2% | \$                     | 1,576,412  |
| Since Inception           | \$                      | 114,701   | 8.8%  | \$                     | 2,175,335  |
|                           |                         |           |       |                        |            |
| UNREALIZED GAINS/(LOSSES) |                         |           |       |                        |            |
| Current YTD               | \$                      | 327,554   | 2.7%  | \$                     | 6,222,938  |
| Since Inception           | \$                      | 1,209,749 | 10.9% | \$                     | 22,973,247 |
|                           |                         |           |       |                        |            |

Reflects assets held at US Bank. Inception defined as the start date of US Bank's role as Investment Manager (4/1/16).

# NEVADA ENVIRONMENTAL RESPONSE TRUST

## FINANCIAL UPDATE

|                        | ADMINISTRATIVE ACCOUNTS |                | ENVIRONMENTAL ACCOUNTS |                   |
|------------------------|-------------------------|----------------|------------------------|-------------------|
| <b>INTEREST INCOME</b> |                         |                |                        |                   |
| Current YTD            | \$                      | <b>132,178</b> | \$                     | <b>2,663,982</b>  |
| Since Inception        | \$                      | <b>592,030</b> | \$                     | <b>10,742,629</b> |
|                        |                         |                |                        |                   |
| <b>DIVIDEND INCOME</b> |                         |                |                        |                   |
| Current YTD            | \$                      | <b>94,274</b>  | \$                     | <b>1,791,475</b>  |
| Since Inception        | \$                      | <b>245,031</b> | \$                     | <b>4,654,774</b>  |
|                        |                         |                |                        |                   |

Reflects assets held at US Bank. Inception defined as the start date of US Bank's role as Investment Manager (4/1/16).

# NEVADA ENVIRONMENTAL RESPONSE TRUST

## FINANCIAL UPDATE

### NERT Portfolio Market Value and Projected Investment Program Net Income

|                                    | MARKET VALUE (3/31/2017) | ANNUAL DIVIDEND/INTEREST |
|------------------------------------|--------------------------|--------------------------|
| <b>FIXED INCOME</b>                |                          |                          |
| Cash                               | \$ 33,370,187            | \$ 162,533               |
| T-Bills, Bonds & Debt              | \$ 872,877,471           | \$ 13,501,757            |
| <b>EQUITIES</b>                    |                          |                          |
| US Equities and REITS              | \$ 246,342,226           | \$ 6,479,660             |
| <b>TOTAL ASSETS &amp; EARNINGS</b> | <b>\$ 1,152,589,884</b>  | <b>\$ 20,143,950</b>     |
| US Bank Fees                       |                          | \$ 653,297               |
| ACG Fees                           |                          | \$ 160,000               |
| <b>PROJECTED NET ANNUAL INCOME</b> |                          | <b>\$ 19,330,653</b>     |

Preliminary projection based upon current market conditions; Subject to change.

# GWETS

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# GWETS

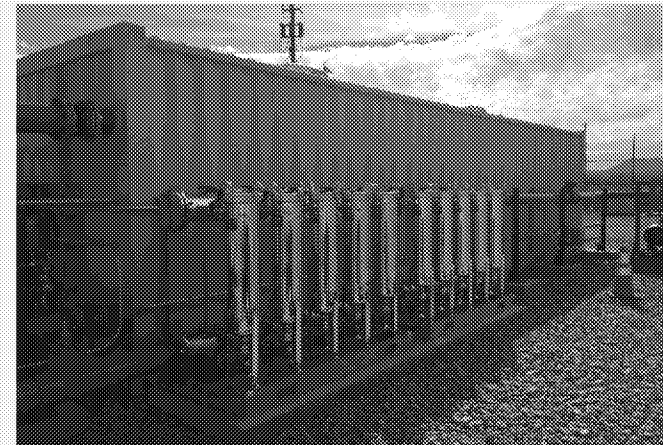
## Facility Status

| GWETS COMPONENT              | STATUS                           |  |
|------------------------------|----------------------------------|--|
| Extraction Wells             | Condition Normal                 | Average total extraction rate at 1140 gpm              |
| Lift Stations / Pipelines    | Condition Normal                 | Pipeline improvements planned for 2017                 |
| GW-11 : Volume               | 45.79 MG<br>~11.5 days available | Desired available volume > 18 days                     |
| Chromium Treatment Plant     | Condition Normal                 | Accepting 73 gpm from IWF and AP Area Extraction Wells |
| Biological Treatment Plant   | Condition Normal                 | Rehabilitation of FBRs complete                        |
| Ion Exchange Treatment Plant | Condition Normal                 | Accepting 250 gpm of 675 gpm generated from SWF        |

## IX Treatment System

Construction of the Ion Exchange (IX) Treatment System was completed in 2016

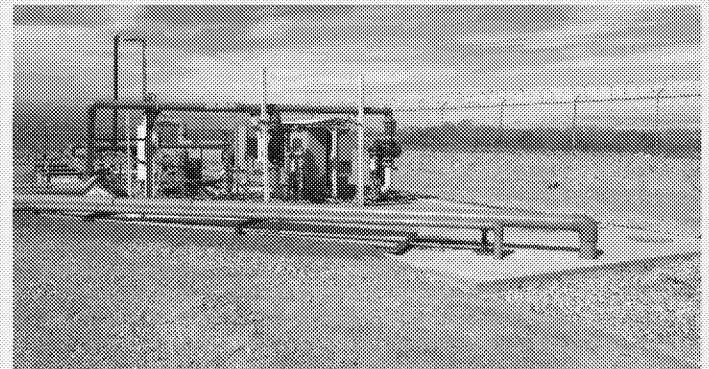
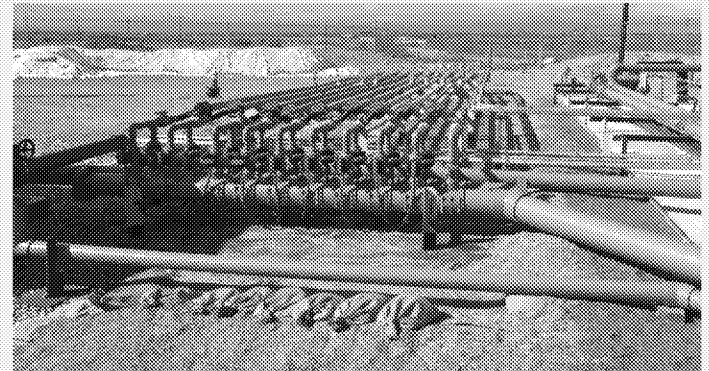
- IX can handle all SWF flow if needed (IX capacity is 1,000 gpm)
- Currently treating flows from PC-118, PC-119, PC-120, PC-121, and PC-133 (~250 gpm)



## IX Treatment System

Construction of the IX Treatment System was completed in 2016

- New manifold system within Lift Station 1 – multiple treatment options
- Lift Station 1 secondary containment structures were enhanced



# CONTINUOUS OPTIMIZATION PROGRAM

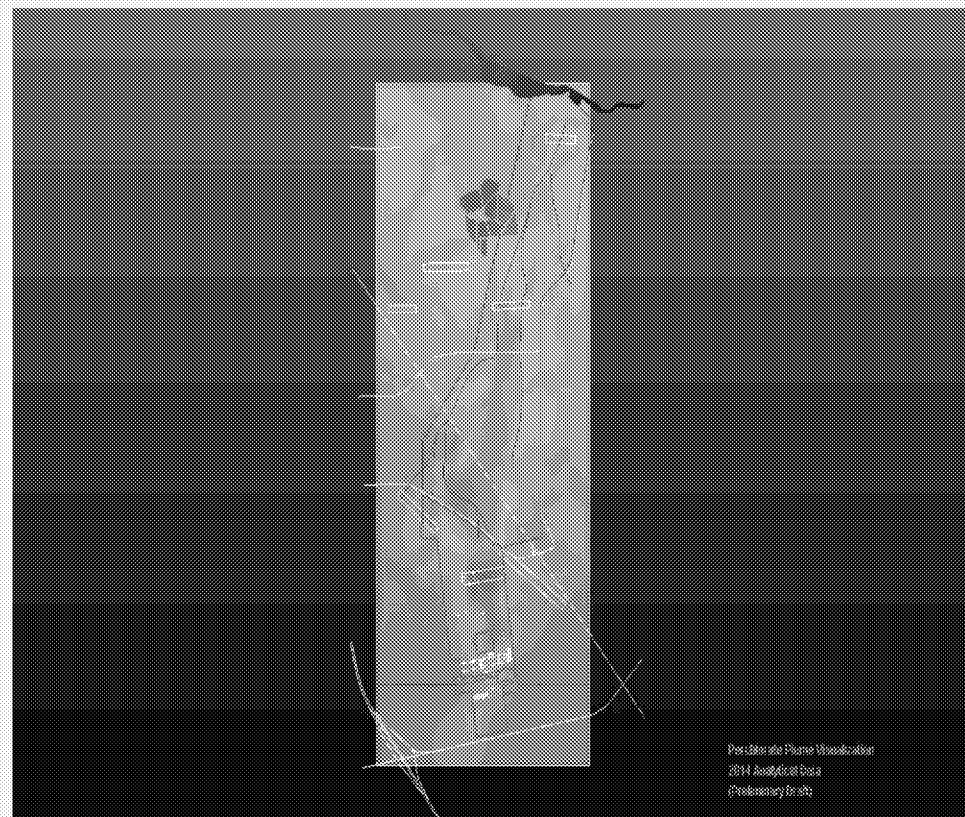
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# CONTINUOUS OPTIMIZATION PROGRAM

## 2015 COP Evaluations

### Lessons Learned from 2015 COP Activities:

- Geology very complex
- Highest concentrations of perchlorate are present in finer grained sediments adjacent to the paleochannels
- Paleochannels have been flushed for over 14 years since the inception of offsite groundwater extraction

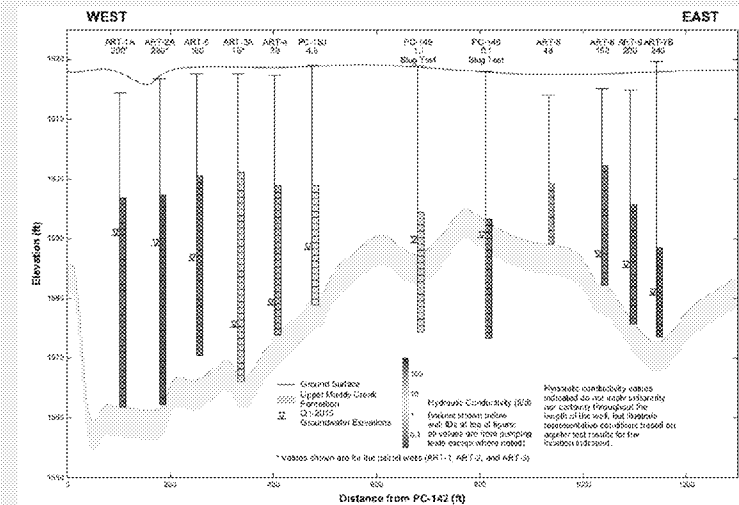


# CONTINUOUS OPTIMIZATION PROGRAM

## 2015 COP Evaluations

### Lessons Learned from 2015 COP Activities:

- Pumping at the AWF and SWF can be increased but infrastructure improvements are required
- Perchlorate mass flux at the SWF can be reduced by capturing higher concentrations of perchlorate in groundwater adjacent to PC-94
- Additional groundwater extraction rate increases at the IWF can not be accomplished without implementation of a long-term soil flushing program
- The effluent pipeline should have excess capacity but unknown factors are restricting flow

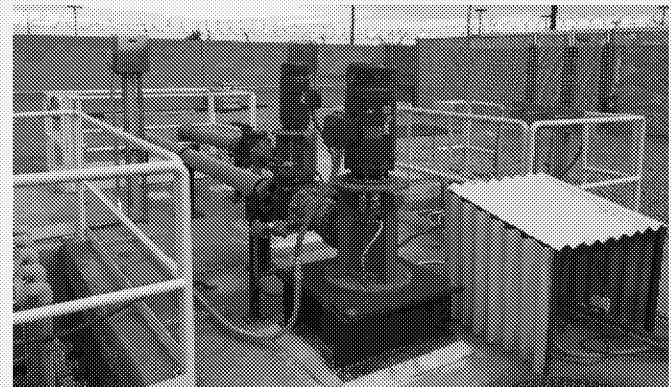


## 2016 COP ACCOMPLISHMENTS

### AWF Improvements

Infrastructure improvements were designed and constructed to facilitate optimization of the AWF

- New well pumps in ART-8 and ART-9 resulted in an increase of 80 gpm across the AWF
- Installation of Variable Frequency Drives (VFDs) for most wells in western flank of AWF allowed for greater control
- Installation of vertical turbine pumps at Lift Station 3 increased the pumping capacity to 500 gpm

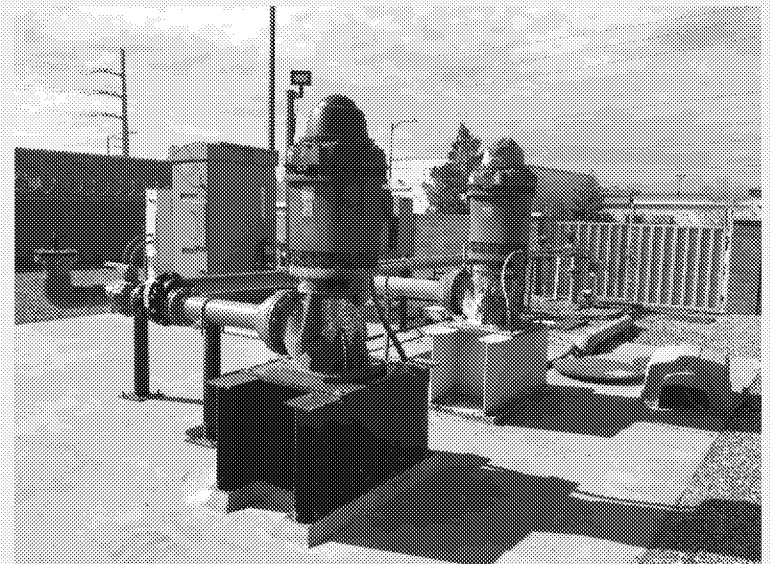


## 2016 COP ACCOMPLISHMENTS

### AWF Improvements

Infrastructure improvements were designed and constructed to facilitate optimization of the AWF

- New backup vertical turbine pump at Lift Station 2 to replace existing under-sized submersible pump and ensure uninterrupted conveyance of water from AWF and SWF

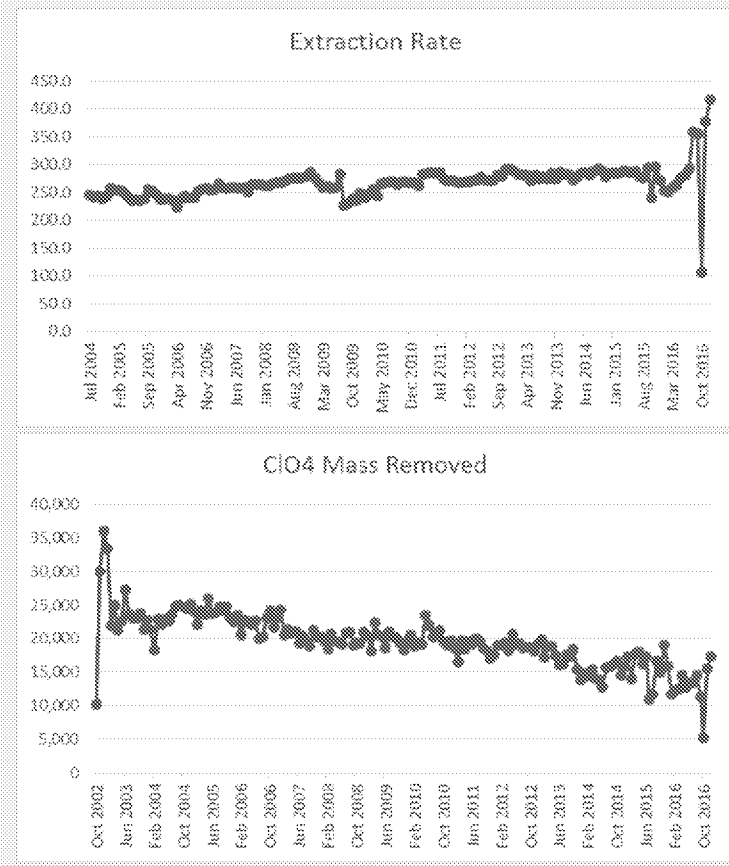


# 2016 COP ACCOMPLISHMENTS

## AWF Optimization

Optimization of the AWF has resulted in an increase in the extraction rate up to 420 gpm

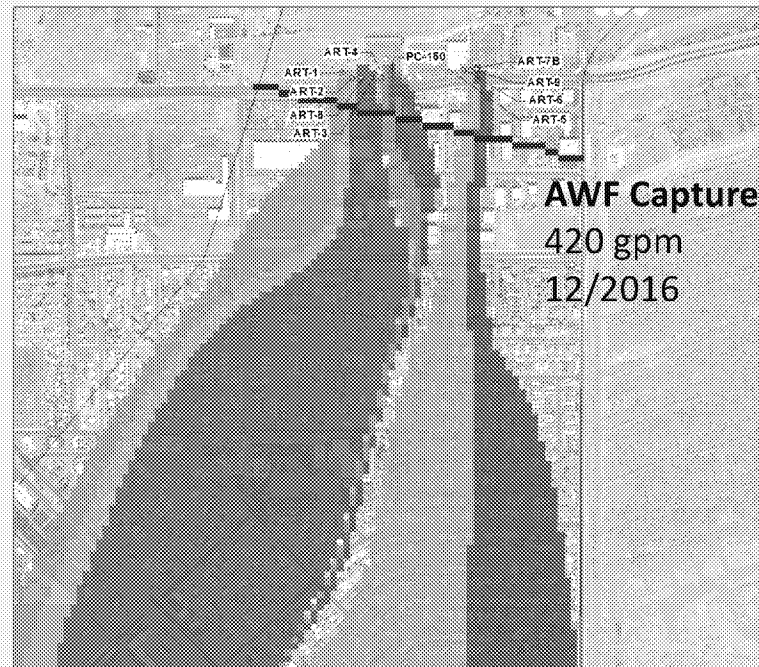
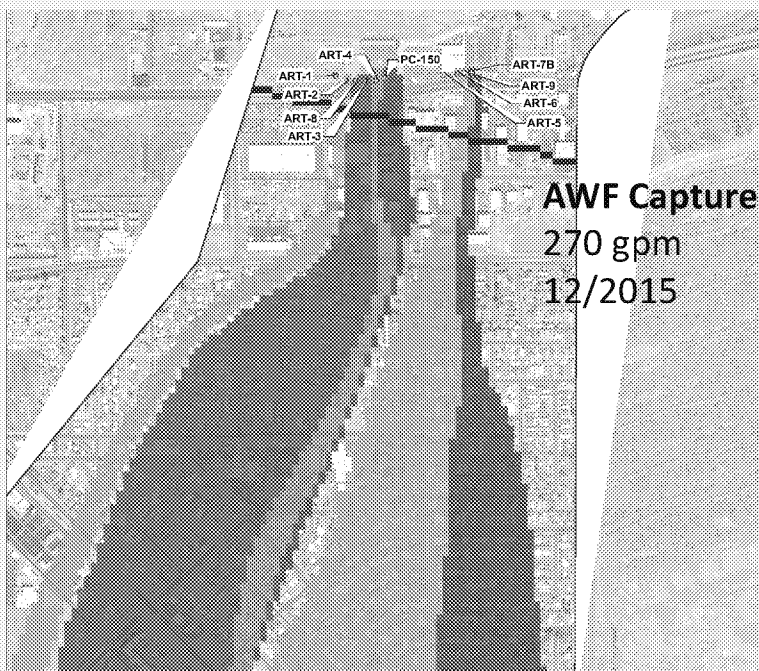
- Increased flow rates in ART-2, ART-8, and ART-9
- Reactivated ART-1
- 48% improvement (135 gpm) from December 2015
- December perchlorate mass removal increased to 17,320 lbs. – only exceeded 5 times over the last 36 months



## 2016 COP ACCOMPLISHMENTS

### AWF Optimization

Optimization of the AWF has resulted in an increase in the extraction rate up to 420 gpm



## 2017 COP OBJECTIVES

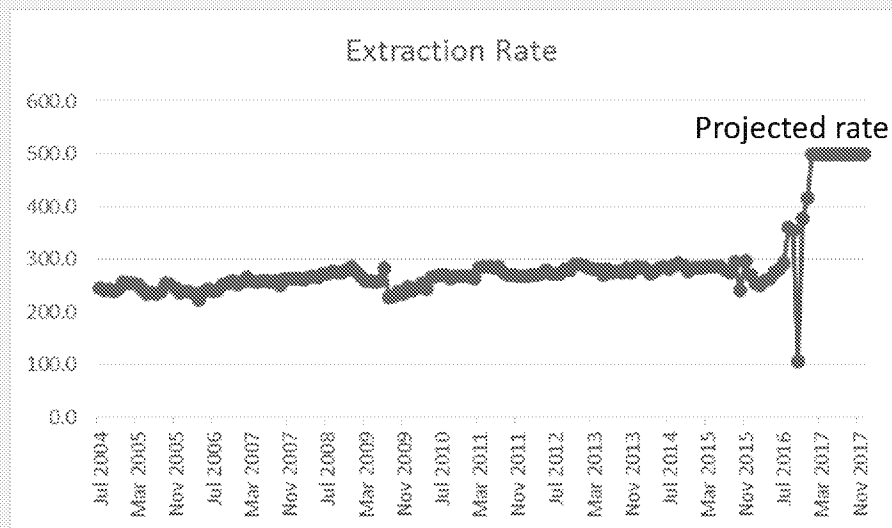
### Program Highlights

- Complete additional optimization at the AWF and SWF
- Measure the performance of the COP based on the total pounds of perchlorate removed from the environment per year (compared to a goal of 400,000 lbs./year of perchlorate)

## 2017 COP OBJECTIVES

### AWF Optimization

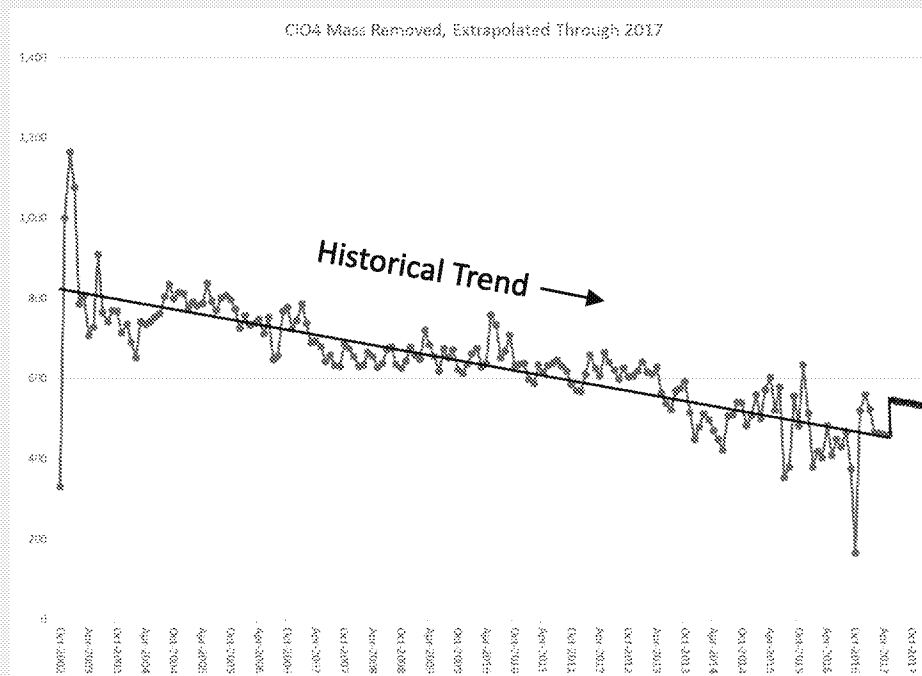
- Install larger pumps in ART-2 and ART-8 targeting 40 gpm increase in each well
- Increase the AWF extraction rate to approximately 500 gpm (78% improvement over the 2015 average extraction rate)



# 2017 COP OBJECTIVES

## AWF Optimization

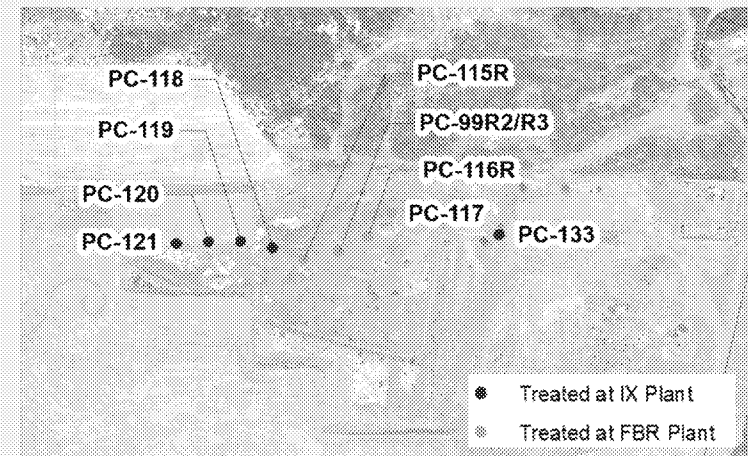
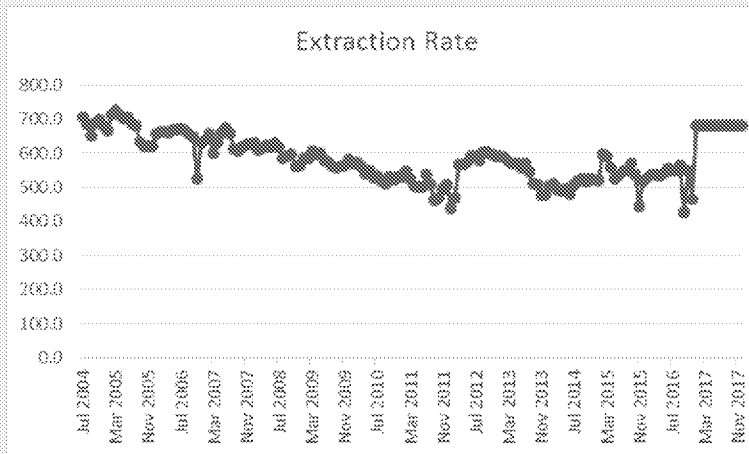
Contribution to 2017 COP ~ 160,000 lbs. of perchlorate



## 2017 COP OBJECTIVES

### SWF Optimization

- As approved by NDEP, NERT reactivated extraction wells PC-120 and PC-121
- Established sustainable extraction rates (90 and 40 gpm, respectively)
- IX Treatment of PC-118, PC-119, PC-120, PC-121, and PC-133

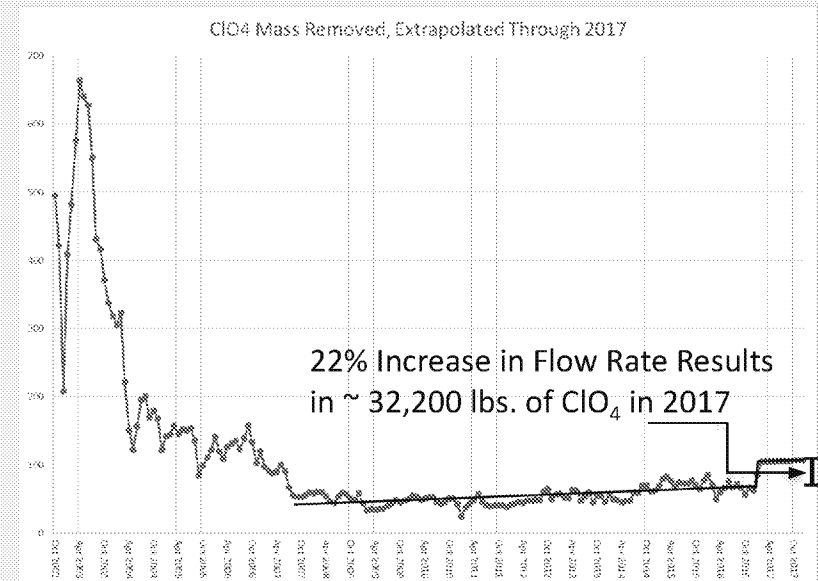


## 2017 COP OBJECTIVES

### SWF Optimization

#### Benefits

- Increases the capture zone and the amount of perchlorate removed from the environment, reduces flux to LVW
- Highest pumping rate since 2004
- Near-term reduction of loading to the LVW
- Contribution to 2017 COP ~ 32,200 lbs. of perchlorate



## 2017 COP OBJECTIVES

### 2017 COP Goals

- IWF Operations – 190,000 *lbs. of perchlorate*
- AWF Optimization - 160,000 *lbs. of perchlorate*
- SWF Optimization - 32,200 *lbs. of perchlorate*
- AP Area Soil Flushing Treatability Study - 13,100 *lbs. of perchlorate*
- SWF Area Groundwater Bioremediation Treatability Study - 700 *lbs. of perchlorate*
- Vacuum Enhanced Recovery Treatability Study – 4,000 *lbs. of perchlorate*

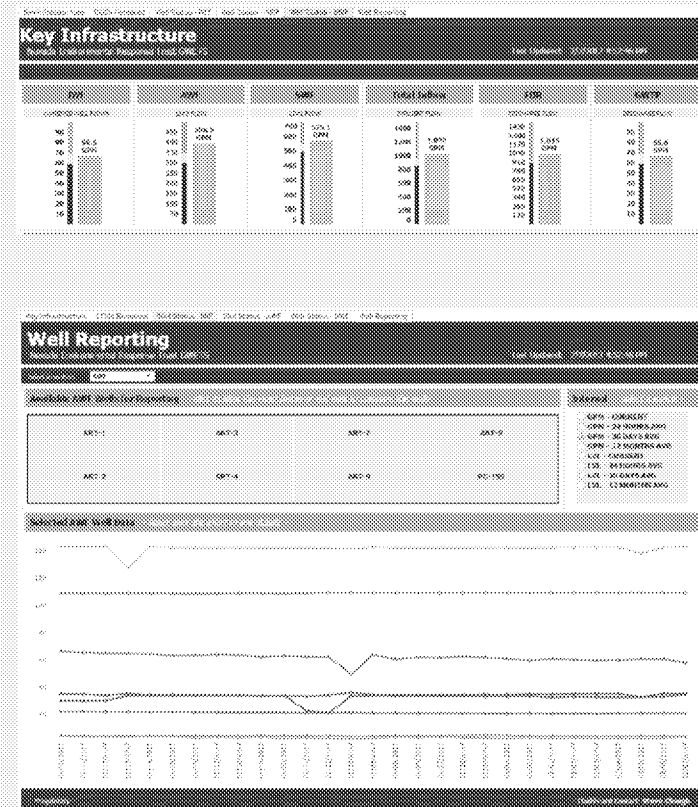
**2017 COP Goal – 400,000 *lbs. of perchlorate***

**2016 Actual – 369,298 *lbs. of perchlorate***

# GWETS/NET

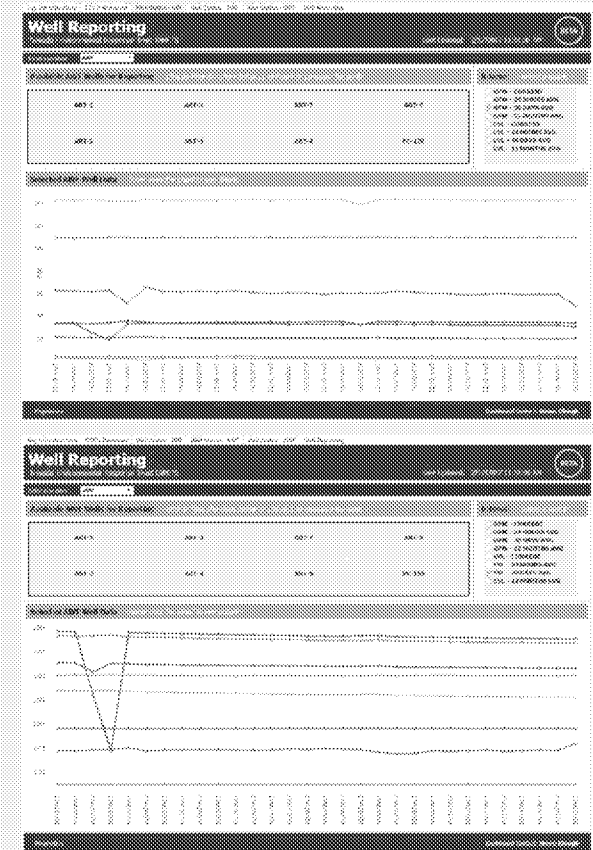
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- Dramatically increased the visibility of operational data in near-real time
- Dashboard provides high level view of system status
- Well field optimization can be performed efficiently using the Well Status and Well Reporting features
- Perchlorate and chromium mass removal by month available for 2016



GWETS/NET increases NERT's ability to optimize the well field extraction rates

- Instantly verify extraction rate of each well field and the effluent discharge rates
- Well field optimization can be quickly evaluated using the pumping rate and water elevation graphing functions
- Quickly evaluate perchlorate and chromium mass removal by month by well field



# AP-5 PROJECT STATUS

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## AP-5 PROJECT STATUS

### Summary

- Phase 2 – Plant construction, pond content transfer to tanks, and equipment decontamination
- Phase 3 – Interim mixing in process tanks
- Phase 4a – Sediment washing and separation of liquids for treatment
- Phase 4b – Treatment of liquids
- Phase 5 – Physical closure of pond



## AP-5 PROJECT STATUS

### Phase 2 Progress

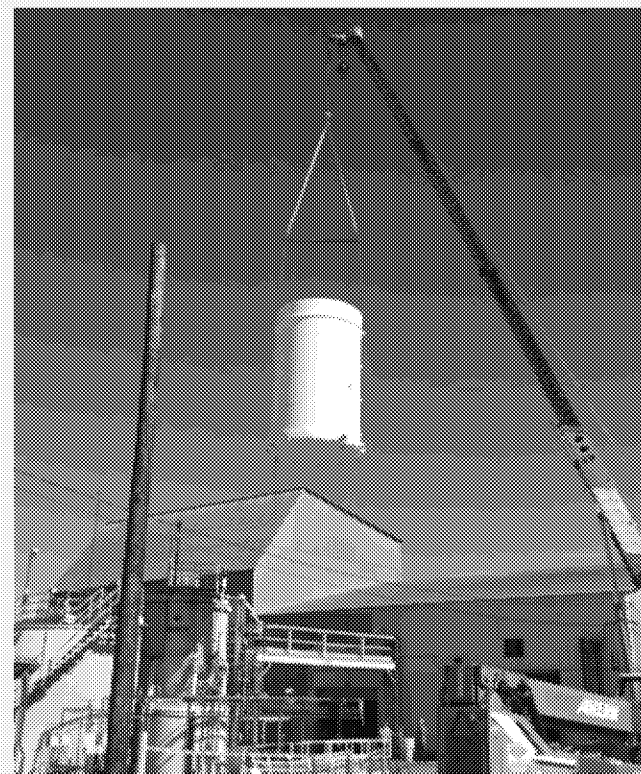
- Plant Construction:
  - Constructed lined process area with secondary containment
  - Constructed three 600,000 gallon stainless steel process tanks and performed hydrostatic testing
  - Installed 40-HP vertical shaft turbine mixers in each process tank



## AP-5 PROJECT STATUS

### Phase 2 Progress

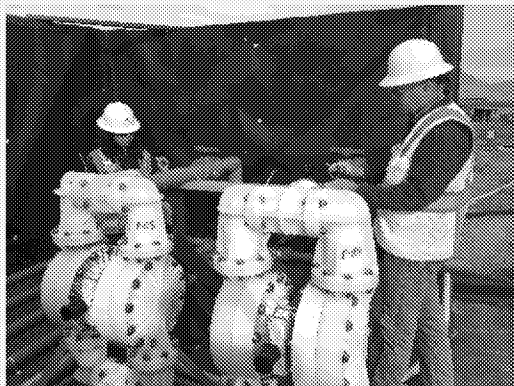
- Plant Construction (continued):
  - Installed day tank
  - Removed unused lime silo and installed receiving tank
  - Constructed solids dewatering pad
  - Installed double-walled transfer pipes from process area to FBR plant and solids dewatering area
  - Finalizing instrumentation and controls



## AP-5 PROJECT STATUS

### Phase 2 Progress

- Pond Contents Transfer:
  - Initiated perchlorate process safety protocols
  - Conducted in-pond circulation to reduce handling/pumping risk
  - Safely completed transfer of pumpable sediment from the pond to the process tanks; removed excess debris from the pond
  - Initiated sediment washing in process tanks to remove and dissolve perchlorate residuals



## AP-5 PROJECT STATUS

### Phase 2 Progress

- Abandoned Equipment:
  - Developed removal and cleaning procedures and conducted Process Hazard Analysis; constructed wash down basin
  - Removed, cleaned, and inspected over 90 items (original inventory was 39 items)
  - Removed 10 drums of smaller unwashable debris



## AP-5 PROJECT STATUS

### Next Steps

- Continue sediment washing
- Decant liquids for treatment
- Transfer decant to receiving tank
- Treatment of decant in FBRs
- Pond closure
  - Processing of sand/gravel residuals
  - Liner removal
  - Berm characterization and removal

# **SNWA WEIR DEWATERING TREATMENT**

MAY 3, 2017 STAKEHOLDERS CALL

# SNWA WEIR DEWATERING TREATMENT

## Project Status

- NDEP issued Weir Treatment Order on March 3, 2017
- Incorporated SNWA design comments regarding 60% design
- Awaiting BOR and BWPC comments on 75% design
- BWPC finalizing Draft permit for public comment
- Initiated permitting process with Clark County and City of Henderson
- Negotiated access with Basic Environmental Company for centralized treatment plant and Sunrise Mountain pump station
- System readiness currently targeted for October 1, 2017

# **2017 STAKEHOLDER TECHNICAL ROUNDTABLES**

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## TECHNICAL ROUNDTABLES

### Upcoming Discussions

#### May

- Vacuum Enhanced Recovery Treatability Study
- Phase 3 Remedial Investigation

#### June

- Las Vegas Wash Bioremediation Treatability Study

#### July

- Galleria Road Biobarrier Treatability Study
- Zero Valent Iron Treatability Study
- Unit 4 Bioremediation Treatability Study

# COMMUNITY INVOLVEMENT UPDATE

MAY 3, 2017 STAKEHOLDERS CALL

## *COMMUNITY INVOLVEMENT UPDATE*

### Community Involvement

- Updated Fact Sheet
- Community mailing to be distributed in late May
- Revised Community Involvement Plan
- Community Meeting on June 21, 2017 (4:30 and 7:30 pm)

# MWD QUESTIONS

MAY 3, 2017 STAKEHOLDERS CALL

## MWD QUESTIONS

### Topics

- Status of NERT RI Downgradient Study Area
- Status of the Phase III RI Work Plan
- NERT's Goals and Priorities for 2017
- Value Engineering evaluations
- Additional NERT and/or Le Petomane employee
- Significance of the VOCs found in soil during the RI Phase 2
- Operation and efficiency of the SWF IX system
- Gantt chart

Questions?